

Amendment Dated 10/19/05  
Response to Office Action Dated 08/19/05

Application No. 09/808,686  
Attorney Docket No. 005222 00157

### REMARKS

Claims 1-30 are pending. Claims 1-30 are rejected.

Applicant acknowledges the withdrawal of rejections of claims 1-9 and 19-24 under 35 U.S.C. § 101.

Applicant believes that the finality in this Office Action is improper as will be discussed. Applicant requests withdrawal of the finality.

#### **Claims Rejections – 35 U.S.C. §112**

**Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.**

Applicant is amending claim 1 to change “the presentation” in line 5 to “a presentation” in order establish a proper antecedent basis. Applicant is also amending claims 1 and 10 to change “usage history” to “a usage history.”

The Office Action also alleges that (Page 2):

Further it is unclear what component the usage history tracks. The claim fails to define how the usage history is gathered.

Applicant is amending claim 1 to include the feature of “(e)(2) selecting pieces of feedback based on the hierarchy and a usage history of specific pieces of feedback text” in order to clarify what is being claimed. The amendment is supported by the specification as originally filed. For example the present patent application discloses (Page 20, lines 18-21. Emphasis added.):

After the ICAT has activated CoachTopics via Rule firings, the Feedback Selection Algorithm is used to determine the most appropriate set of CoachItems (specific pieces of feedback text associated with a CoachTopic) to deliver. The Algorithm accomplishes this by analyzing the concept hierarchy (TopicGroup tree), the active CoachTopics, and the usage history of the CoachItems.

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Applicant is similarly amending claim 10 to include the feature of "logic that selects pieces of feedback based on the hierarchy and a usage history of specific pieces of feedback text." Claims 2-9 and 11-30 ultimately depend from claims 1 and 10 and are definite for at least the above reasons. Applicant requests reconsideration of claims 1-30.

### **Claims Rejections – 35 U.S.C. §102**

**Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by International Publication No. WO 97/44766 (the '766 publication).**

Regarding independent claims 1 and 10, the Office Action alleges that (Page 4, section 3.):

Regarding the features added to claims 1 and 10 by the amendment dated 07/12/05, the '766 publication further teaches: evaluating work of the student by training concept, the training concepts being organized in a hierarchy (p. 106, 32 – p. 107, 6 and p. 113, 1-7); selecting pieces of feedback based on the hierarchy (p. 113, 8-34) and usage history (p. 100, 34 – p. 101, 8); and assembling and delivering the feedback to the student (p. 109, 29 – p. 111, 17).

The '766 publication fails to even suggest the features of "evaluating work of the student by training concepts, the training concepts being organized in a **hierarchy**," "selecting pieces of feedback based on the **hierarchy** and a usage history of specific pieces of feedback text," and "assembling the pieces of feedback" as included in claim 1. (Emphasis added.) The '766 publication does disclose (Page 106, line 32 – page 107, line 6):

The global parameters set by the agent and which control the materials are preferably state variables that the materials sequencing logic references in order to make educationally significant sequencing decisions. The meanings of state variables to which particular material is sensitive can be established at materials initialization according to specifications in a header materials data entry. Examples of such variables range from simple flags, such as those controlling the availability of helps and hints, to more sophisticated parameters, such as those controlling the rate of new concept introduction, the density of examples, or the speed of discrimination exercises.

The '766 publication further discloses (Page 113, lines 1-7):

The standardization of the student data object according to this exemplary embodiment of IMIS for elementary education is simply achieved by storing

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student performance data according to instruction context, instruction format, and subject area. Thereby, these characteristics can be taken into account when comparing student pedagogic performance in general across subject matter areas.

However, the above teachings in the '766 publication does not relate to a hierarchy of training concepts. While the specification does not define the meaning of "hierarchy," the words of the claim must be given their plain meaning in accordance with MPEP § 2111.01. In particular, the plain meaning of "hierarchy" is "a series in which each element is graded or ranked." (The American Heritage College Dictionary, 1997, Third Edition, Houghton Mifflin Company.) The '766 publication fails to teach anything about hierarchy. The '766 publication further discloses (Page 113, lines 8-34):

The final component of IMS standardization is that of the agent action processing tables, the policy filter table, the decision weight table, and the selection rules. Event messages from the materials inform the agent of current values for the instructional context and instructional format. Since these values are parameters available to evaluate the conditions and functions contained in these tables, these tables can be, in effect, segmented into parts each corresponding to a particular instructional context and instructional format. Since there is considerable overlap between parts of these tables, the number of rules does not proliferate. The current subject area is also available to segment the tables in the cases of those subjects that can require special treatment by agent action processing. Further, the IMIS standardization permits a more systematic and effective use of the mechanism which the agent uses to set global variables in the materials. These variables facilitate adaptive adjustments of instructional parameters, such as seeding rate and amount of prompting. These variables can be more effectively set in view of the current educational paradigm as indicated by the current values of the instructional context and format. IMIS is also useful in providing information to the student in response to "Where am I?" inquiries. The system can use the information contained in the entities in the information triple to respond, "You are halfway through the drill and practice on fractions," for example.

The above teaching does not even suggest pieces of feedback that relate to hierarchical training concepts. The '766 publication also discloses (Page 109, lines 29-35. Emphasis added.):

**Each of these educational paradigms is preferably handled differently by the agent in response to differing descriptive information and student performance data.** For example, a sequence of correct responses in a fluency exercise is expected. On the other hand, a sequence of correct responses in a paired associates exercise can be worth while for the agent to comment on.

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While the above teaching appears to suggest different approaches for providing feedback for different educational paradigms (Table 3 categorizes modes of instruction using a list of educational paradigms that include "Interactive tutorial," "Fluency exercise," "Paired association exercise," "Discrimination formation exercise," and "Simulation exercise"), the '766 publication fails to even suggest assembling different feedback pieces for the different exemplary educational paradigms.

Similarly, claim 10 includes the features of "logic that evaluates work of the student by training concepts, the training concepts being organized in a hierarchy," "logic that selects pieces of feedback based on the hierarchy and usage history," and "logic that assembles the pieces of feedback." Claims 2-9 and 19-24 ultimately depend from claim 1, and claims 11-18 and 25-30 ultimately depend from claim 10. Applicant requests reconsideration of claims 1-30.

#### **Finality of Office Action**

The Office Action asserts that (Page 5):

**THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

However, Applicant believes that the finality of the Office Action is improper. MPEP § 706.07(b) does state (Emphasis added.):

The claims of a new application may be finally rejected in the first Office action in those situations where (A) the new application is a continuing application of, or a substitute for, an earlier application, and (B) **all claims of the new application (1) are drawn to the same invention claimed in the earlier application, and (2) would have been properly finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application.**

As stated above, both conditions (A) and (B) must be true in order to impose finality in the first Office Action after filing a request for continued examination under 37 CFR § 1.114. In the previous paper filed on July 12, 2005, Applicant amended claims 1 and 10 to include additional features. The claims are not drawn to the same invention as claimed in the earlier application,

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and thus condition (B), as required by MPEP § 706.07(b), is not valid. Applicant requests withdrawal of the finality of the Office Action.

It is respectfully submitted that the present application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,

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